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This book contains some of the papers presented at the Fifth International Symposium on Solar-Terrestrial Physics, held in Ottawa, August 17–22, 1982. The purpose of the Symposium was to focus on the physical mechanisms that govern transfer, storage and dissipation of energy and momentum in the solar-terrestrial system; on the structure, dynamics and mutual interactions of different plasma regions and the upper atmosphere; and on the generation and propagation of solar disturbances and their effects on Earth's environment. As in the previous International STP Symposia, the presentations' format was to deal with physical interpretations and theory, discussion of data, individual events and instrumental techniques was not envisaged.

Contents: Opening Address and Foreword. Part I. Solar Activity. Part II. Solar Wind and Interplanetary Disturbances. Part III. Shock Acceleration Processes and Cosmic Rays. Part IV. Solar Wind-Magnetosphere Coupling. Part V. Ring Current, Plasmasphere and Wave-Particle Interactions. Part VI. Magnetosphere-Ionosphere Interactions and Terrestrial Effects. Part VII. Thermosphere/Middle Atmosphere.

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